

Service Area Plan

Department of General Services

Statewide Laboratory Services (72604)

Service Area Background Information

Service Area Description

This service area performs more than 3 million tests annually, providing high quality laboratory services, including research and scientific investigations, to agencies serving to protect the health and welfare of the citizens of Virginia and the environment in which they live.

Service Area Alignment to Mission

This service area aligns directly with the agency's mission to provide quality, cost-effective and timely laboratory services, enhancing the safety and security of all Commonwealth citizens.

Service Area Statutory Authority

Chapter § 2.2-1103 of the Code of Virginia provides for the establishment of the Division of Consolidated Laboratory Services and its responsibility to provide laboratory services for the Commonwealth.

Chapter § 2.2-1104 of the Code of Virginia establishes specific laboratory, testing and analytical functions of the Division.

Service Area Customer Base

Customer(s)	Served	Potential
Citizens of the Commonwealth (Unlimited)	0	0
Federal Agencies	15	15
Hospitals	50	50
Local Governments (Unlimited)	0	0
Local Health Departments	125	125
Other States	5	5
Private Laboratories	151	1,350
Public Laboratories	70	70
Public/Private Water Works	2,740	3,200
State Executive Branch agencies and institutions	20	20

Anticipated Changes In Service Area Customer Base

With the establishment of the Virginia Environmental Laboratory Certification Program, DCLS will be responsible for the certification of an additional 900 to 1200 commercial and governmental laboratories.

Service Area Partners

**State and Local Police, Fire and Hazardous Material Teams, State and Local Governmental Agencies
District Health Departments, Federal Agencies, Drinking Water Laboratories, Milk Laboratories, Private
Physicians, Courier Services Contractors**

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Service Area Products and Services

- Newborn screening services
- Testing of animal and human tissue for infectious or toxic agents
- Testing of consumer products
- Testing of drinking water
- Laboratory Certification
- Testing for threats to the environment
- Testing for possible terrorist threats

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Factors Impacting Service Area Products and Services

DCLS is widely recognized by other state laboratories, customers, and local, state and federal agencies as an excellent laboratory with superb staff that provides high quality consultation and results. Laboratory personnel have achieved national recognition from their peers and have received numerous awards. The DCLS laboratory facility is considered to be the model for laboratories currently being planned and constructed throughout the US. This reputation has been earned through the willingness of the people working in the laboratory to accept and embrace the changes that have occurred in the sciences and was possible only because state government and its leaders supported those changes.

The laboratory has added automation to analytical processes as resources allowed. Those additions have significantly improved the throughput of several laboratories – in some cases doubling or tripling the volume of samples that can be processed in a day. More automation is possible with supplemental funding, and the addition of a laboratory information system will also improve productivity.

Tight state budgets have reduced the sample volume from some state agencies. At the same time, demands for services have expanded due to increased concerns about terrorism and environmental threats such as spills and severe weather, and expansion of mandated new born screening services. Laboratory sample volume has increased about 5% per year over the past decade.

DCLS does not currently have a division-wide Laboratory Information Management System (LIMS), resulting in the use of paper request forms to order most laboratory services. Results of analytical findings are reported to customers on paper. Transferring paper reports delays the receipt of information customers need to make critical decisions. Data generated by laboratory instruments are not captured electronically. Data and quality assurance reviews are done manually. Specimen tracking, quality assurance and administrative processes are inefficient.

The laboratory has received federal grant support to improve capacity to respond to threats of terrorism, including the purchase of complex testing equipment. Loss of federal funding provided for maintenance will impact equipment operation and reliability, causing delays in reporting results.

Current salaries for scientists are well below current market rates for similar private sector positions. The retention of highly trained and experienced scientists is necessary to provide critical laboratory services for health and well being of the citizens of the Commonwealth. It also directly impacts the labs ability to respond in times of crisis. In order to meet the ongoing needs for highly trained scientists, the laboratories must provide technical skills enhancement training, and provide upward mobility programs aimed at retaining critical employees.

Anticipated Changes To Service Area Products and Services

New state regulations go into effect March 1, 2006, increasing the number of metabolic disorders tested from 9 to 28.

The implementation of a Laboratory Information Management System (LIMS) will reduce the cost and improve the efficiency of obtaining lab services while improving the quality and response times for product delivery.

The construction of a BioSafety Level IV lab will improve the safety of work operations and enhance the scope of services provided to law enforcement and public health communities.

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Service Area Financial Summary

This service area is funded from multiple funding sources. The service area receives 42.5% of its funding from general fund appropriations. General funds primarily support public health testing. 57.5% of the funding is revenue derived from fees for the testing of newborn babies for genetic diseases, fees for the testing of water from public water supplies, fees for testing samples from the Department of Environmental Quality and the Department of Agricultural and Consumer Services, and from federal grants.

	<u>Fiscal Year 2007</u>		<u>Fiscal Year 2008</u>	
	General Fund	Nongeneral Fund	General Fund	Nongeneral Fund
Base Budget	\$9,542,353	\$13,486,493	\$9,542,353	\$13,486,493
Changes To Base	\$726,406	\$1,168,750	\$774,609	\$1,168,750
SERVICE AREA TOTAL	\$10,268,759	\$14,655,243	\$10,316,962	\$14,655,243

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Service Area Objectives, Measures, and Strategies

Objective 72604.01

Provide timely, accurate and high quality test results.

DCLS currently performs over 3 million scientific tests each year. Getting work done quickly and accurately is critical for our customers' success. The information gathered from this objective will help to ensure that the quality of laboratory services provided to the Commonwealth meets or exceeds the highest standards possible.

This Objective Supports the Following Agency Goals:

- Improve our customers' business processes
- Strengthen our customers' safety and security condition

This Objective Has The Following Measure(s):

- **Measure 72604.01.01**

Attain and maintain an annual cumulative accuracy rate of 99% or better testing proficiency samples.

Measure Type: Outcome

Measure Frequency: Annually

Measure Baseline: For the years 2002 through 2004, DCLS has an average accuracy rate of 99%

Measure Target: Maintain an annual cumulative accuracy rate of 99% or better on proficiency sample results for DCLS testing procedures.

Measure Source and Calculation:

Proficiency sample receipt and test performance data are captured by the laboratory Quality Assurance Group. Proficiency test results are evaluated by a referee outside of DCLS. The measure is calculated by correct answers divided by total samples tested.

Objective 72604.01 Has the Following Strategies:

- Encourage and stimulate the pursuit of quality by all employees
- Enforce policies that improve quality in the laboratory
- Monitor findings and, when errors are detected, assure corrective actions are initiated and followed and potential problems that can lead to error are eliminated.
- Assign representatives from each group within DCLS to participate on the Quality Assurance Committee.
- Develop a fully integrated Laboratory Management Information System that will enable quality assurance/quality control procedures to be built into the system for increased efficiency of error detection/prevention.

Objective 72604.02

Exceed customer's expectations for laboratory test results within customer defined turn-around-times.

DCLS provides laboratory support services to local, state and federal health, law enforcement, agriculture and environmental protection agencies, maintaining a diverse test menu with over 600 methods to meet the broad needs of these customers. Millions of tests are performed each year on food products, animal feeds, air, water, waste, soil, air, motor fuels, and human and animal tissue specimens.

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Test results are used to make decisions to protect consumers, identify, control and eliminate infectious disease, screen for inborn errors of metabolism and other genetic disorders in newborn children, ensure the quality of the food we eat, soil used to grow our crops, air we breathe and water we drink. Timely and accurate analysis results are necessary for agencies to carry out their missions.

This Objective Supports the Following Agency Goals:

- Improve our customers' business processes
- Strengthen our customers' safety and security condition
- Provide cost effective and efficient services

This Objective Has The Following Measure(s):

- **Measure 72604.02.01**

Percent or test results reported within defined service turnaround time.

Measure Type: Outcome **Measure Frequency:** Annually

Measure Baseline: Over the past five year period, DCLS has met or exceeded customers' expectation for receiving test results an average of 96% of the time.

Measure Target: 96% at the end of FY07; 98% at the end of FY08.

Measure Source and Calculation:

Data obtained from Laboratory Information Management System (LIMS). Calculation is based on the number of days between date sample received by DCLS and date test results are reported to customer.

Objective 72604.02 Has the Following Strategies:

- Improve communications with customers to enhance capacity and reduce product delivery costs.
- Improve flexibility, increase throughput, improve quality and decrease errors.
- Develop and fully implement a Laboratory Information Management System.
- Assess current major equipment capabilities and expand and replace technology to increase analytical precision and throughput.